IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of TSUNEKA ET AL.

Application No. 10/516,621 Group Art Unit: 1713

Filed: 12/03/2004 Examiner: WILLIAM K. CHEUNG

For: AQUEOUS RESIN DISPERSION COMPOSITION AND PROCESS FOR

PRODUCING THE SAME

DECLARATION

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

- I, TSUNEKA Tatsuo, hereby declare:
- That I am one of the inventors of the instant invention, and
- 2) That the experiments given below were carried out under my general direction and supervision.

1. EXPERIMENTS

Comparative Experiment 1

Thirty grams of an acid-modified chlorinated polyolefin (propylene content in the propylene-ethylene copolymer: 94.5 mol%, graft-copolymerized maleic anhydride content: 2.0 wt.%, chlorine content: 21.4 wt.%, weight-average molecular weight: 52000) and 70 g of

tetrahydrofuran were placed in a stirrer-equipped flask and heated to 65°C to dissolve. While maintaining the temperature at 65°C, water at 60°C was added dropwise. When 100 g of water had been added, the resin precipitated, making it impossible to obtain a dispersion. Further, 0.94 g (2 chemical equivalents) of dimethylethanolamine was added, and the tetrahydrofuran was distilled off for 1 hour under reduced pressure at 93 kPa, but it was impossible to obtain a dispersion (aqueous resin dispersion composition).

Comparative Experiment 2

acid-modified chlorinated Thirty οf grams an polyolefin (propylene content in the propylene-ethylene copolymer: 94.5 mol%, graft-copolymerized maleic anhydride content: 2.0 wt.%, chlorine content: 21.4 wt.%, weightaverage molecular weight: 52000) and 70 g of toluene were placed in a stirrer-equipped flask and heated to 65°C to dissolve. While maintaining the temperature at 65°C, water at 60°C was added dropwise. When 100 g of water had been added, the resin precipitated, making it impossible to Further, 0.94 q (2 chemical obtain a dispersion. equivalents) of dimethylethanolamine was added, and the toluene was distilled off for 1 hour under reduced pressure at 93 kPa, but it was impossible to obtain a dispersion (aqueous resin dispersion composition).

Comparative Experiment 3

Thirty grams of an acid-modified chlorinated polyolefin (propylene content in the propylene-ethylene copolymer: 94.5 mol%, graft-copolymerized maleic anhydride content: 2.0 wt.%, chlorine content: 21.4 wt.%, weight-average molecular weight: 52000) and 70 g of toluene were placed in a stirrer-equipped flask and heated to 65°C to dissolve. Then, 0.94 g (2 chemical equivalents) of dimethylethanolamine was added, and while maintaining the temperature at 65°C, water at 60°C was added dropwise. When 100 g of water had been added, the resin precipitated, making it impossible to obtain a dispersion. Further, the toluene was distilled off for 1 hour under reduced pressure at 93 kPa, but it was impossible to obtain a dispersion (aqueous resin dispersion composition).

2. CONSIDERATION

As is evident from Comparative Experiments 1 and 2, a dispersion (aqueous resin dispersion composition) cannot be obtained when water is added before neutralization.

Further, Comparative Experiment 3 demonstrates that when using toluene as a solvent, a dispersion (aqueous resin dispersion composition) cannot be obtained even when water is added after neutralization.

I, the undersigned, declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: May 9, 2006

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TSUNEKA Tatsuo